

May 16, 2013

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RE: *United States v. SABIC Innovative Plastics US LLC, et al.*, No. 3:12-cv-76  
Submission of Final Corrective Action Plan

Pursuant to Paragraph 50(b) of the Consent Decree in the above-referenced matter, enclosed is the final Corrective Action Plan (CAP) of the Mt. Vernon, Indiana plant. This final CAP is the result of the first annual third-party LDAR audit conducted at the Mount Vernon facility pursuant to the Consent Decree. The LDAR Audit Commencement Date was November 26, 2012, which makes July 24, 2013 the deadline to submit the final CAP. Therefore, this submission is timely.

Please contact Mike Kharouta at (812) 831-7439 if you have any questions.

CERTIFICATION: I certify under penalty of law that I have examined and am familiar with the information submitted in this document and all attachments and that this document and its attachments were prepared either by me personally or under my direction or supervision in a manner designed to ensure that qualified and knowledgeable personnel properly gather and present the information contained therein. I further certify, based on my personal knowledge or on my inquiry of those individuals immediately responsible for obtaining the information, that the information is true, accurate, and complete.

  
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## **SABIC Innovative Plastics Mt. Vernon, LLC Final Corrective Action Plan**

**To: File for Consent Decree – Enhanced LDAR Program**

**From: Mike Kharouta**

**Date: May 16, 2013**

**Re: Preliminary Corrective Action Plan**

### **Background**

The SABIC Innovative Plastics Mt. Vernon, LLC (SABIC) site is subject to certain requirements pursuant to the Consent Decree in United States of America v. SABIC Innovative Plastics US LLC (SABIC US) and SABIC Innovative Plastics Mt. Vernon, LLC (SABIC MTV) (Civil Action No. 3:12-cv-00076, United States District Court, Southern District of Indiana; effective December 5, 2012); the requirements of “SABIC MTV” apply to SABIC. One such requirement is that SABIC was required to have a third party conduct an audit of the LDAR program at the Covered Process Unit (Phenol plant) pursuant to Paragraphs 46-49 of the Consent Decree (which includes conducting comparative monitoring in the Covered Process Unit). If the results of the audit identified any deficiencies or if any of the Comparative Monitoring Leak Ratios are 3.0 or higher, then the site is required to develop a preliminary Corrective Action Plan (CAP) according to the requirements found in Paragraph 50 of the Consent Decree.

Mt. Vernon contracted with Trihydro to conduct the third-party LDAR audit (commenced November 26, 2012), and the audit identified some deficiencies (however, none of the Comparative Monitoring Leak Ratios was 3.0 or higher). Thus, a preliminary CAP was required, and was to have been prepared by April 25, 2013, which was done.<sup>1</sup>

The preliminary CAP had to describe the actions that have been taken or will be taken to address the deficiencies. Also, a schedule had to have been included by when actions that had not yet been completed would be completed. Each corrective action item had to have been completed promptly, with the goal of completing each action item within 90 days after the LDAR Audit Completion Date.

This document is the final CAP, which must be submitted to EPA by no later than 120 days after the LDAR Audit Completion Date (by July 24, 2013)

Note that this preliminary CAP addresses only the Mt. Vernon site. The Burkville site is dealing separately with its requirements under these paragraphs of the Consent Decree.

### **Deficiencies Identified and Corrective Actions**

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<sup>1</sup> The deadline to prepare the preliminary CAP was 30 days after the LDAR Audit Completion Date, which was March 26, 2013. The Consent Decree defines the LDAR Audit Completion Date as 120 days after the LDAR Audit Commencement Date, which as noted was November 26, 2012.

Trihydro identified two deficiencies in the LDAR Audit. A description of each deficiency and its corresponding corrective action are listed below. Note that all corrective actions have been completed. In addition, Trihydro made three observations that, while not identified as deficiencies, SABIC addressed following the discussion of the deficiencies. All corrective actions associated with the observations have also been completed.

Deficiency 1: Documentation for components on delay of repair is incomplete for the following components:

- Tag 11566, the form was incomplete, i.e. date of shutdown and return to service had not been completed.

Corrective Action: The date of shutdown and the date of return to service were entered on the form.

Status: Completed.

- Tag 10478, the form did not contain the rationale for the need for a shutdown of equipment as indicated on the form.

Corrective Action: The rationale was added to the form.

Status: Completed.

- Tag 11030, the database indicates that this component was not repaired during the recent [fall 2012] process shutdown; however, there is documentation to indicate that the component was worked on during the shutdown, i.e. "added packing." Thus, the repair was not effective. Additionally, the documentation for this component is not complete. Note: the documentation for this component was appropriately updated during the on-site portion of the audit.

Corrective Action: Component 11030 (valve) was placed on delay-of-repair because repair required a process unit shutdown. The Maintenance team performed a repair attempt during the fall 2012 shutdown by adding more packing to the valve. Upon repair verification monitoring (conducted after startup from the shutdown), the repair attempt made during the shutdown was found not to have been effective. This is not a deviation, but it did constitute a new leak under the rule (Subpart H). The valve was again placed on delay-of-repair awaiting the next process unit shutdown.

Status: Completed.

Deficiency 2: Components were placed on delay of repair that did not require a process unit shutdown.

- Tag 26941 was repaired via a drill and tap method; however, the documentation indicated that a shutdown would be required to complete the repair.

Corrective Action: Component 26941 was repaired as required by the rule and M21 monitoring was performed with a passing result (13 PPM). Then, the component was placed on delay-of-repair, which was in error because no further repair action was required.

Status: Completed.

- Tags 26938, 26939, and 11566 components on delay of repair were repaired via a “tightened and cleaned” method, i.e. a method that would not require a shutdown to complete a repair, and therefore should not have been listed as delay of repair.

Corrective Action: Components 26938 and 26939 were repaired as required by the rule and M21 monitoring was performed with passing results (13 PPM) , all within 15 days of discovering the leak. Then, they were placed on delay-of-repair, which was erroneous because no further repair action was required. Component 11566 (valve) was placed on delay-of-repair because repair (replacement of the valve) required a process unit shutdown. The valve was replaced, but the technician stated the wrong type of repair (tightened) on the repair log. The GuideWare record for this component has been updated to reflect the actual repair (replacement of valve).

Status: Completed.

Trihydro’s non-finding “observations” were as follows:

- OBSERVATION 1: The site wide LDAR document stated that the number of LDAR personnel is sufficient to fulfill the requirements of this LDAR program and ELP based upon the percentage of time each person dedicates to LDAR and the relative size of the facility. However, the document seemed not to have enough detail on how the number of the LDAR technicians is sufficient to satisfy the requirements.

Corrective Action: Changes were made to the site-wide LDAR document, in section 5.4.9, to explain how the number of the LDAR technicians is sufficient to satisfy the requirement of the Consent Decree.

Status: Completed.

- OBSERVATION 2: There are 24 valves that have been designated as UTM valves in the Phenol unit. Only two of these valves have a documented reason as to the rationale used to designate them as UTM. SABIC MTV at the time of the audit was in the process of clarifying and documenting the specific rationale for the UTM designations.

Corrective Action: The process of clarifying the specific rationale for UTM designations was completed by 12/31/12 and the rationale was incorporated into the LDAR database.

Status: Completed.

- OBSERVATION 3: Trihydro observed two open ended lines (OELs) while conducting comparative monitoring. The OELs were associated with pumps P209B (component 10653) and P444B (component 17839). In both cases, the valves (components 10653 and 17839) serve as the OEL closure device for the system but were not in their closed positions. Both OELs were tagged and immediately reported to operations to be addressed.

Corrective Action: The OELs issues were corrected promptly by closing the second valves, and additional OEL awareness training was provided to the Phenol operation.

Status: Completed.

### **Comparative Monitoring**

Per Paragraph 50 of the Consent Decree, if the "Comparative Monitoring Leak Ratio" for any Covered Type of Equipment in either Covered Process Unit is 3.0 or higher, then corrective actions must be identified to address the deficiencies and/or causes. However, the results of the comparative monitoring showed that no component type had a leak ratio of 3.0 or higher. Thus, there are no corrective actions identified arising out of the comparative monitoring conducted during the audit.